

plate. The parts of the housing **132** may be formed from a variety of structural materials such as metals, plastics and the like.

[0073] In this configuration, when a user presses down on a button zone **126**, the ears **158** on the other side of the button zone **126**, which are contained within the alignment notches **170**, are pinned against the retaining plates **146**. When pinned, the contact point between the ears **158** and the retaining plates **146** define the axis around which the touch pad assembly **130** pivots relative to the housing **132**. By way of example, ears **158A** and **158B** establish the axis for button zone **126A**, ears **158C** and **158D** establish the axis for button zone **126D**, ears **158A** and **158C** establish the axis for button zone **126C**, and ears **158B** and **158D** establish the axis for button zone **126D**. To further illustrate, when a user presses on button zone **126A**, the touch pad assembly **130** moves downward in the area of button zone **126A**. When button zone **126A** moves downward against the spring force of the switch **150A**, the opposing ears **158A** and **158B** are pinned against the corners of retaining plates **146**.

[0074] Although not shown, the touch pad assembly **130** may be back lit in some cases. For example, the circuit board can be populated with light emitting diodes (LEDs) on either side in order to designate button zones, provide additional feedback and the like.

[0075] As previously mentioned, the input devices described herein may be integrated into an electronic device or they may be separate stand alone devices. FIGS. **13** and **14** show some implementations of an input device **200** integrated into an electronic device. In FIG. **13**, the input device **200** is incorporated into a media player **202**. In FIG. **14**, the input device **200** is incorporated into a laptop computer **204**. FIGS. **15** and **16**, on the other hand, show some implementations of the input device **200** as a stand alone unit. In FIG. **15**, the input device **200** is a peripheral device that is connected to a desktop computer **206**. In FIG. **16**, the input device **200** is a remote control that wirelessly connects to a docking station **208** with a media player **210** docked therein. It should be noted, however, that the remote control can also be configured to interact with the media player (or other electronic device) directly thereby eliminating the need for a docking station. An example of a docking station for a media player can be found in patent application Ser. No. 10/423,490, "MEDIA PLAYER SYSTEM," filed Apr. 25, 2003, which is herein incorporated by reference. It should be noted that these particular embodiments are not a limitation and that many other devices and configurations may be used.

[0076] Referring back FIG. **13**, the media player **202** will be discussed in greater detail. The term "media player" generally refers to computing devices that are dedicated to processing media such as audio, video or other images, as for example, music players, game players, video players, video recorders, cameras, and the like. In some cases, the media players contain single functionality (e.g., a media player dedicated to playing music) and in other cases the media players contain multiple functionality (e.g., a media player that plays music, displays video, stores pictures and the like). In either case, these devices are generally portable so as to allow a user to listen to music, play games or video, record video or take pictures wherever the user travels.

[0077] In one embodiment, the media player is a handheld device that is sized for placement into a pocket of the user.

By being pocket sized, the user does not have to directly carry the device and therefore the device can be taken almost anywhere the user travels (e.g., the user is not limited by carrying a large, bulky and often heavy device, as in a laptop or notebook computer). For example, in the case of a music player, a user may use the device while working out at the gym. In case of a camera, a user may use the device while mountain climbing. In the case of a game player, the user can use the device while traveling in a car. Furthermore, the device may be operated by the users hands, no reference surface such as a desktop is needed. In the illustrated embodiment, the media player **202** is a pocket sized hand held MP3 music player that allows a user to store a large collection of music (e.g., in some cases up to 4,000 CD-quality songs). By way of example, the MP3 music player may correspond to the iPod MP3 player manufactured by Apple Computer of Cupertino, Calif. Although used primarily for storing and playing music, the MP3 music player shown herein may also include additional functionality such as storing a calendar and phone lists, storing and playing games, storing photos and the like. In fact, in some cases, it may act as a highly transportable storage device.

[0078] As shown in FIG. **13**, the media player **202** includes a housing **222** that encloses internally various electrical components (including integrated circuit chips and other circuitry) to provide computing operations for the media player **202**. In addition, the housing **222** may also define the shape or form of the media player **202**. That is, the contour of the housing **222** may embody the outward physical appearance of the media player **202**. The integrated circuit chips and other circuitry contained within the housing **222** may include a microprocessor (e.g., CPU), memory (e.g., ROM, RAM), a power supply (e.g., battery), a circuit board, a hard drive, other memory (e.g., flash) and/or various input/output (I/O) support circuitry. The electrical components may also include components for inputting or outputting music or sound such as a microphone, amplifier and a digital signal processor (DSP). The electrical components may also include components for capturing images such as image sensors (e.g., charge coupled device (CCD) or complimentary oxide semiconductor (CMOS)) or optics (e.g., lenses, splitters, filters).

[0079] In the illustrated embodiment, the media player **202** includes a hard drive thereby giving the media player massive storage capacity. For example, a 20 GB hard drive can store up to 4000 songs or about 266 hours of music. In contrast, flash-based media players on average store up to 128 MB, or about two hours, of music. The hard drive capacity may be widely varied (e.g., 5, 10, 20 MB, etc.). In addition to the hard drive, the media player **202** shown herein also includes a battery such as a rechargeable lithium polymer battery. These type of batteries are capable of offering about 10 hours of continuous playtime to the media player.

[0080] The media player **202** also includes a display screen **224** and related circuitry. The display screen **224** is used to display a graphical user interface as well as other information to the user (e.g., text, objects, graphics). By way of example, the display screen **224** may be a liquid crystal display (LCD). In one particular embodiment, the display screen corresponds to a 160-by-128-pixel high-resolution display, with a white LED backlight to give clear visibility in daylight as well as low-light conditions. As shown, the